Remarks/Arguments

In the specification, the two paragraphs beginning on page 11 at line 18 and line 20 have been amended to clarify the units of measure. These paragraphs now conform the specification to the claims, which previously had been amended in response to the Examiner's request for clarification in the Office action mailed on December 8, 2000. No new matter has been added.

Claims 1–7 and 9–21 remain in the application. Claim 8 is canceled. Claim 10 has been amended to correct a typographical error.

Response to Rejections Under 35 U.S.C. § 103(a)

The Examiner's rejection of pending Claims 1–7, 9, 11–12, and 16–19 under 35 U.S.C. § 103(a) as unpatentable over Doi et al. (U.S. 6,378,999) in view of Zhu (U.S. 5,889,083), and either Sano et al. (U.S. 5,324,349) or Kubota et al. (U.S. 6,232,370) is respectfully traversed.

On page 3, second full paragraph, of the Office action, the Examiner states, "The difference between Doi et al. and the present claimed invention is the requirement in the claims of (a) amount of acrylic resin emulsion in ink composition and (b) particle size of ink." With respect to difference (a), Doi et al. mention acrylic resin emulsion only twice in the specification—at column 12, line 4 in the context of controlling "ink properties" and in Example 14—and not at all in the claims. Since the disclosure of the emulsion in Doi et al. is no more than an indefinite amount of one compound in a laundry list of disparate compounds or a minor example among a number of unclaimed compositions, it is unlikely that Doi et al. appreciated the contribution that acrylic resin emulsion makes to the Applicants' invention. The passing mention in Doi et al. would not motivate the person of ordinary skill in the art to combine the teachings of Sano et al. or Kubota et al. for a specific amount, nor would Sano et al. or Kubota et al. motivate the skilled artisan to look to the teachings of Doi et al.

Conversely, acrylate resin emulsion is a component of nearly every embodiment of the Applicants' claimed invention, and the novelty and nonobviousness of its important contribution to the Applicants' invention is clear. The Examiner is respectfully requested to reconsider the support upon which she relies for the motivation to combine Doi et al. with Sano et al. or Kubota et al. to reject the referenced claims for obviousness.

As to difference (b), and with all due respect, the Examiner's conclusory statement that particles of 280-300 nm would be expected to be present in a sample described by average particle sizes of 15–200 nm or of 30–250 nm is unsupported by substantial evidence in the art upon which she relies. *See McElmurry v. Arkansas Power & Light Co.*, 995 F.2d 1576, 1578, 27 U.S.P.Q.2d 1129, 1131 (Fed.Cir. 1993) ("Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact.") A numerical average particle size of a sample, without more, provides no information whatsoever about the range of specific particle sizes in the sample or about the amount—or presence—of particles of a particular size in the sample. Applicants respectfully disagree that disclosure of an average particle size range provides factual basis to conclude that particles of a size range exclusive of the average size range are present in the sample. As such, and in view of conclusions drawn in the previous paragraph and in the response to the Office action mailed on November 22, 2002, Applicants respectfully request that the Examiner withdraw her rejection of Claims 1–7, 9, 11–12, and 16–19 .

The Examiner's rejection of pending Claims 10, 13, 15, 20, and 21 under 35 U.S.C. § 103(a) as unpatentable over Doi et al. (U.S. 6,378,999) in view of Zhu (U.S. 5,889,083), and either Sano et al. (U.S. 5,324,349) or Kubota et al. as applied to Claims 1–7, 9, 11–12, and16–19, and further in view of Ma et al. (U.S. 6,455,628) is respectfully traversed.

Regarding the surface tension requirements recited in claims 10, 13, 15, 20, and 21, the Examiner states that "there is no explicit disclosure of the surface tension of ink comprising water, ethanol, solubilized dispersant, pigment, defoamer and acrylic emulsion as presently claimed" in Doi et al. *See* Office action, page 5, third full paragraph. It is important to note, in view of this admitted absence of disclosure, that Doi et al. did measured the surface tension of the ink compositions disclosed in the examples provided. Of the seventeen examples, Doi et al. claimed and disclosed only six having surface tensions within the broadest range of 25–42 mN/m (equivalent to dynes/cm). Of these six, the composition of none reads on all the limitations of the instant claims. It is clear, as the Examiner admits, that the compositions envisioned by Doi et al. were distinct from those of the Applicants' invention. Since Doi et al. exemplify a number of ink compositions that "satisfied all the required conditions" of that invention (*see* Doi et al., col. 33, lines 48–49), there would be no motivation to seek out other references to combine with the teachings of Doi et al., such as Ma et al. or those of the other inventors cited by the Examiner. *See In re Dembiczak*, 175 F.3d 994, 999–1000, 50 U.S.P.Q.2d 1614, 1617 (Fed.Cir. 1999) ("conclusory statements regarding the teaching of multiple references, standing alone," is not evidence of material fact required

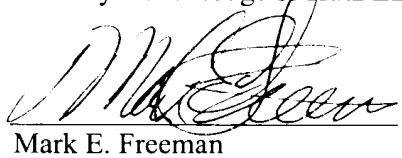
in order to find the motivation to combine those references). The Applicants therefore respectfully request that the Examiner withdraw her rejection of Claims 10, 13, 15, 20, and 21 as obvious under 35 U.S.C. § 103(a).

Accordingly, the present invention should be found to be patentable. Applicants respectfully request that a timely Notice of Allowance be issued in this case.

A petition for a one-month extension of time under 37 C.F.R. 1.136(a) and check for the required fee of $110.00 is enclosed. The Commissioner is hereby authorized to debit any additional amount which may be required, or to credit any overpayment, related to this submission to Deposit Account No. 03-2775.

Respectfully submitted,

Connolly Bove Lodge & Hutz LLP



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